BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

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| In The Matter Of | ) | |
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| PUBLIC UTILITIES COMMISSION | ) | DOCKET NO. 03-0371 |
| | ) | |
| Instituting a Proceeding to Investigate Distributed Generation in Hawaii | ) | |
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PRELIMINARY STATEMENT OF POSITION OF

THE GAS COMPANY, LLC,

AND CERTIFICATE OF SERVICE

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PRELIMINARY STATEMENT OF POSITION OF
THE GAS COMPANY, LLC

The Gas Company, LLC ("TGC"), a party in the above-captioned proceeding, hereby respectfully submits its Preliminary Statement of Position, attached hereto, pursuant to Prehearing Order No. 20922, issued April 23, 2004.

Dated at Honolulu, Hawaii, this 7th day of May, 2004.

Respectfully submitted,

THE GAS COMPANY, LLC

By _____
George T. Aoki, Esq.
Attorney for The Gas Company, LLC

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**PRELIMINARY STATEMENT OF POSITION**

## I. BACKGROUND

The term "distributed generation" (DG) generally refers to electric generation resources other than electric utilities' central power plants that may or may not be connected to the electric grid and are dispersed throughout the system. DG encompasses a wide range of generation projects from small units of a few kilowatts located on an end user's premise and used to serve that single user or premise, to larger installations that are designed to serve multiple customers by feeding into the electric grid. In some instances, an electric utility may site one or more generating units at one of its substation properties to provide distributed supplementary and/or emergency power for a specific community.

TGC believes that the DG concerns and potential solutions offered in this proceeding may differ depending on the size and number of units, the number of end users being served, and the uses of the power being generated. Therefore, for purposes of this preliminary statement of position, TGC has examined and responded to the issues as they relate to small-scale distributed generation projects that are located on the end user's property and are primarily designed and used to serve only the electrical needs of that end user or property. However, in the course of this proceeding, TGC may take a position(s) on other types of DG installations.

TGC supports the concept of DG and believes that it has the potential to increase the reliability of electric service and provide cost-effective energy efficiency in the state. TGC believes that these benefits can best be realized by providing clear and consistent guidelines to ensure a level playing field for the orderly investment in and development of DG.

## II. SUMMARY

TGC generally believes that electric end users who intend to install an electric generating unit(s) on their premises to meet any portion or all of their electric energy needs should be free to select the generation technology of their choice, provided that all applicable legal requirements are met (e.g., construction/building codes and permitting requirements, environmental regulations, standards, etc.). The end user should also be free to select from among vendors/developers offering an array of options as to engine sizes and types, fuels, equity and risk-sharing arrangements, warranties, energy sale and service contract terms, and the like. In the event that the end user also intends to take electric service from the electric utility grid and/or transmit electric power into the electric utility grid, TGC recognizes that the user must also meet any applicable Commission-approved requirements.

To the extent that DG facilities are sited on a user's property and are designed and used only to meet the electrical needs of that user or property, TGC believes that these DG facilities should be deemed non-utility in nature, regardless of ownership. Such treatment is consistent with the classification of gas facilities as utility or non-utility.

Should the incumbent electric utilities elect to compete for the above-described DG installations, TGC believes that the Hawaii community would best be served by establishing a level playing field for all potential competitors and neutralizing an electric utility's natural market power to encourage a more competitive market. One means would be to classify these

installations as being non-regulated so they would not qualify for utility cost recovery and an allowed rate of return. That is, electric utilities would engage in this type of user-sited DG only on a below-the-line, shareholder-financed basis. If warranted by market power, this could also include electric utilities competing via a separately capitalized and separately staffed non-regulated affiliate.

## III. PLANNING ISSUES

**1. What forms of distributed generation (e.g., renewable energy facilities, hybrid renewable energy systems, generation, cogeneration) are feasible and viable for Hawaii?**

For the small DG installations that TGC is addressing in this document, TGC believes that the end users should be able to select the form(s) that best meets the energy needs and requirements of the owner/property, without restriction. However, the installations must meet all governmental regulations, permitting requirements, etc.

**2. Who should own and operate distributed generation projects?**

TGC believes that the public interest in Hawaii is best served by establishing a level playing field and giving entities a realistic opportunity to compete in the provision of electric services by designing, installing, owning, operating, and maintaining DG. As previously indicated, TGC believes that user-sited DG installations would be deemed non-utility and not part of the regulated electric utility business, similar to the treatment of non-utility gas service by TGC and other non-regulated gas providers.

TGC notes that in previous proceedings, the electric utilities, the Consumer Advocate, customers, electric utility competitors, and others have all recognized that "the existing electric utilities have dominant market shares in their respective service areas that will be difficult to

overcome...".[1] As a result of the acknowledged market power of the incumbent electric utilities, TGC believes that any ownership or operation by electric utilities of small, user-sited DG should be structured to mitigate such market power, (for example, through a separately capitalized, separately staffed non-regulated affiliate).

TGC believes that user-sited DG installations comprise one segment of Hawaii energy markets in which competition can be practicable and could produce beneficial results for Hawaii residents, as the benefits as well as costs of this form of generation are borne by the individual users and/or their developers.

TGC does not believe that it is necessary for user sited DG installations to be owned and operated by an electric utility for the following reasons:

a. Installation and ownership of user-sited generation is not a traditional utility function. Other state commissions treat user-sited DG as non-utility and non-jurisdictional.

b. The effect of user-sited DG on utility reliability is no different whether the DG is owned or operated by the utility, by the customer, or by an independent third party. That is, the system reliability and benefits that accrue from user-sited DG are a function of unit characteristics and other external factors that are not related to ownership. Therefore, the effect on utility service is not a justification for the utilities to own and/or operate user-sited DG.

If electric utilities are allowed to design, construct, install, own and/or operate user-sited DG systems to their benefit and the benefit of their utility customers, TGC believes that the regulatory agencies must then consider significant impacts on other utilities and utility customers under their jurisdiction. For example, combined heat and power units (CHP), a form of DG, can

[1] Final Statement of Position of Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited, in Docket No. 96-0493 at ~ 39 (Oct. 16, 1998).

serve both heating and electrical loads at the same time, significantly improving energy efficiency for the end user. Electric utility ownership of a CHP installation that replaces a utility gas water heater would effectively transfer gas utility sales to the electric utility. TGC believes that steps should be taken to prevent impacts such as this from occurring. There should also be provisions for developing a compromise, if the situation cannot be entirely avoided, that will mitigate the harm to both utilities and their customers. Unmanaged problems such as this could hinder the orderly development of cost effective and efficient energy options and reduce the potential benefits to the community.

**3. What are the roles of the regulated electric utility companies and the Commission in the deployment of distributed generation in Hawaii?**

a. Role of the electric utility companies: As indicated in the previous sections, TGC believes that small DG installations serving a single property should be non-utility, non-jurisdictional installations. If an electric utility chooses to compete in this market, it should do so through a separately capitalized, separately staffed affiliate as a means of providing a level playing field for all competitors. For example, when the entity that became Hess Microgen first came to Hawaii to explore DG opportunities, it was an affiliate of a North Carolina electric utility.

Customers' association of an electric utility company with all things electrical appears to be due in large part to the electric utilities' longstanding monopoly franchise, the sheer size of their customer base relative to that of other Hawaii companies (virtually 100% market penetration), and their advertising of DSM measures and available rebates at other ratepayer expense. It is probable that any user demand for electric utility involvement in small-scale DG arises from the conscious or unconscious leveraging of this type of market power. This is what

would need to be overcome in order to create a level playing field for businesses that do not have the same advantages.

b. Role of the Commission in the deployment of distributed generation in Hawaii: TGC does not envision any substantial additional regulatory oversight for the small DG installations being addressed by TGC. Since the DG installation would be designed and used to serve a single customer or property, the installation would be deemed a non-utility service in a manner consistent with the differentiation of utility and non-utility gas service. The applicable electric tariff and regulations should apply if the user requires utility service and/or if the user transmits power into the electric grid.

## IV. IMPACT ISSUES

**4. What impacts, if any, will distributed generation have on Hawaii's electric transmission and distribution systems and market?**

With regard to small, user-sited DG installations that are not designed or used to deliver power to the electric grid, TGC believes that the impact will be generally limited to ensuring that Commission-approved requirements and any other applicable governmental requirements are met by the user and the electric utilities. TGC may modify this position based on discovery in this proceeding.

**5. What are the impacts of distributed generation on power quality and reliability?**

With regard to small, user-sited DG installations that are not designed or used to deliver power to the electric grid, TGC believes that the impact will be generally limited to the user. For users also taking firm and/or backup power from the electric utility, TGC believes that the Commission-approved requirements for electric service will prevent most, if not all, potential power quality or reliability disturbances from affecting the electric grid. At this time, TGC is not

familiar enough with electrical design requirements to determine if there are sufficient rules in place to isolate these DG installations from the electric grid during abnormal conditions.

**6. What utility costs can be avoided by distributed generation?**

In the abstract, for existing utility load (both gas therms and kWh, in some cases) that is switched to small, user-sited DG, there will be a general reduction in variable operating costs, primarily fuel. Further cost avoidance would depend on the degree of backup service requested and used by the user.

For new load that has not previously been served by a utility, there would not be an avoidance of any existing variable costs. If it were possible to predict future utility load to a high degree of accuracy, it would be theoretically possible to determine the cost impacts of deferral of new load, either with or without backup. TGC believes that the difficulty in determining how much has not been spent on a scenario that has not happened has been the subject of other dockets that may, or may not, be applicable here.

**7. What are the externalities costs and benefits of distributed generation?**

Since TGC believes that the user should be free to choose the DG system that best suits the user's needs, the externality impacts would be dependent on the type and size of system that is selected. It appears that most of the technologies provide operating specifications regarding emissions, fuel usage, noise levels, height, etc. that would enable an externality evaluation to be conducted that is similar to those that the electric utilities have conducted for similar, larger units.

TGC notes that there are externality benefits to DG installations that displace utility-owned electric central generation with more efficient generation, renewables and/or cleaner fuels. The benefits include increasing the state's energy security by diversifying the fuels used,

reduced emissions, and the strategic system benefits of dispersed generation in the event of system disruptions. However, other than required permitting, TGC is not presently aware of any requirement for determining externality costs and benefits for non-utility facilities.

**8. What is the potential for distributed generation to reduce the use of fossil fuel?**

TGC takes no position on this issue at this time.

## V. IMPLEMENTATION ISSUES

**9. What must be considered to allow a distributed generating facility to interconnect with the electric utility's grid?**

TGC takes no position on this issue at this time except to note that TGC is participating in the Ad Hoc Advisory Group convened pursuant to HCR No. 172, HD1, on the Development and Implementation of Standard Offer Contracts and Standardized Interconnection Agreements to Reduce the Approval Process Time for the Implementation of Renewable Energy Systems and to Facilitate the Purchase of Electricity from Renewable Energy Producers in Hawaii.

**10. What are the appropriate rate design and cost allocation issues that must be considered with the deployment of distributed generation facilities?**

TGC believes that small, user-sited DG installations that are not designed or used to deliver power to the electric grid would be deemed non-utility and non-jurisdictional in nature. Based on this, there would not appear to be any rate design or cost allocation issues for this segment of DG.

In general, TGC believes that rate design and cost allocation are complex issues that need to be addressed in the context of particular utilities' service offerings, including their base rates as well as special rates and riders (such as interruptible rates, time-of-use rates, standby riders,

etc.), because rate schedules, riders, surcharges and cost allocations are set in relation to one another.

**11. What revisions should be made to the integrated resource planning process?**

The *Framework for Integrated Resource Planning* was developed and filed in 1992.[2] Since then there have been many changes in energy technology as well as the utility environment. At that time the Commission noted:

> "The commission has fashioned a framework that falls short of the level of specificity proposed by the Consumer Advocate and BOPS, but is in greater detail than urged by the utilities. In fashioning its framework the commission was guided by the need for the framework to ensure the achievement of the fundamental purpose of integrated resource planning, and by the need to allow each utility flexibility in fashioning a process that fits its particular characteristics."

Since then individual customers have become more aggressive in seeking cost effective energy service alternatives, and the technology has advanced sufficiently to support this change. DG installations are an example.

TGC believes that the framework remains relevant as structured but that the entities covered by the framework should review their responsibilities in recognition of the changes that are taking place. For example, when evaluating a utility's integrated resource plan, it may not be enough to ensure that the plan promotes the interest of only that utility's customers. Combined heat and power ("CHP") units are a form of DG that serves both heating and electrical loads at the same time. This type of installation can affect both gas and electric utility customers at the same time. In order to minimize or avoid unintended consequences, a possible response may be for the integrated resource plan filings and evaluations to identify the potential shifts in load among the different energy sources, shifts in risks from one customer group to another, and to describe both desirable and undesirable consequences.

[2] Decision and Order No. 11523, Docket No. 6617, filed on March 12, 1992 and Decision and Order No. 11630, Docket No. 6617, filed on May 22, 1992.

TGC believes that the increasing energy options available to consumers have increased the complexity of the energy market and environment for all stakeholders so that it is no longer reasonable to view projects and plans on a purely stand alone basis. This could result in unintended consequences affecting the economic well being of the community.

**12. What forms of distributed generation (e.g., renewable energy facilities, hybrid renewable energy systems, generation, cogeneration) are feasible and viable for Hawaii?**

See response to Question 1.

**13. What revisions should be made to state administrative rules and utility rules and practices to facilitate the successful deployment of distributed generation?**

TGC reserves its position on this issue until later in the proceeding. Rule revision proposals are detailed and labor-intensive, and should reasonably be undertaken only after due consideration and a greater exposition of the issues and the positions of the parties.

**14. The Parties and Participants may also address general issues regarding distributed generation raised in the informal complaint filed by Pacific Machinery, Inc., Johnson Controls, Inc. and Noresco, Inc. against HECO, MECO and HELCO on July 2, 2003 (Informal Complaint no. IC-03-098), but not specific claims made against any of the Parties named in the Complaint.**

TGC takes no position on these issues at the present time but may do so in response to the positions of others.

## VI. PERTINENCE OF ISSUES AND NEED FOR COMMISSION ACTION

TGC believes that the issues raised by the Commission in this docket are pressing and critical to Hawaii's energy future and has indicated why they are pertinent and need to be addressed by the Commission in its discussion of each issue.

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I hereby certify that I have this day served the foregoing Preliminary Statement of Position, together with this Certificate of Service, electronically and by first class mail, postage prepaid, to the following:

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Dated: Honolulu, Hawaii, May 7, 2004.

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